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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,878	03/10/2004	Steven E. Froehlich	POU919990061US2	5065

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EXAMINER	
MANCHO, RONNIE M	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/797,878	FROEHLICH ET AL.	
	Examiner	Art Unit	
	Ronnie Mancho	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*. See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/10/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1- 43 rejected under 35 U.S.C. 102(b) as being anticipated by Krause (6047323).

Regarding claim 1, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses a method of updating components in a computing environment, said method comprising:

updating a component of said computing environment (col. 1, lines 64 to col. 1, lines 1-6) which is associated with at least a portion of a unit of work from one version to another version; and emulating, by said updated component, said one version while at least one other component of said computing environment associated with said unit of work remains at said one version (col. 7, lines 65 to col. 8, lines 1-43; col. 9, lines 1-30).

Regarding claim 2, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 1, wherein said component and said at least one other component comprise multiple images of a single program, and said unit of work comprises a single task.

Regarding claim 3, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 2, wherein said multiple images are in communication with one another.

Regarding claim 4, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 1, wherein said component and said at least one other component process said unit of work on a plurality of nodes of a distributed computing environment.

Regarding claim 5, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 1, wherein said updating comprises updating a component identifier of said updated component to correspond to said another version.

Regarding claim 6, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 5, further comprising:

comparing said component identifier of said updated component with at least one component identifier of said at least one other component to determine whether said updated component and said at least one other component have been updated;

emulating, by said updated component, said one version if any one of said updated component and said at least one other component have not been updated; and

processing said updated component and said at least one other component at said another version if said updated component and said at least one other component have been updated.

Regarding claim 7, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 1, further comprising:

utilizing a cluster version identifier to represent a lowest running version of said distributed computing environment; and

emulating, by said updated component, said lowest running version when any one of said component and said at least one other component have not been updated to said one version.

Regarding claim 8, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 7, further comprising updating said cluster version identifier, to correspond to said one version, when said component and said at least one other component have been updated to said one version.

Regarding claim 9, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 1, further comprising backing said updated component out of said another version to an older version.

Regarding claim 10, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 9, wherein said backing out comprises updating a component version identifier of said backed out component to correspond with said older version.

Regarding claim 11, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 9, wherein said older version comprises said one version.

Regarding claim 12 Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses method of claim 9, wherein said older version comprises an intermediate version.

Regarding claim 13, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim 12, further comprising emulating, by said backed-out component, said one version.

Regarding claim 14, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the method of claim l, wherein said updating comprises updating a plurality of components of said computing environment.

Regarding claim 15, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; cols. 8-18; fig. 12) discloses a system for updating components in a computing environment, said system comprising:

means for updating a component of said computing environment which is associated with at least a portion of a unit of work from one version to another version; and

means for emulating, by said updated component, said one version while at least one other component of said computing environment associated with said unit of work, remains at said one version.

Regarding claim 16, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 15, wherein said component and said at least one other component comprise multiple images of a single program, and said unit of work comprises a single task.

Regarding claim 17, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 16, wherein said multiple images are in communication with one another.

Regarding claim 18, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 15, wherein said component and said at least one other component process said unit of work on a plurality of nodes of a distributed computing environment. Regarding claim 19, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 15, wherein said means for updating comprises means for updating a component identifier of said updated component to correspond to said another version.

Regarding claim 20, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 19, further comprising: means for comparing said component identifier of said updated component with at least one component identifier of said at least one other component to determine whether said updated component and said at least one other component have been updated;

means for emulating, by said updated component, said one version if any one of said updated component and said at least one other component have not been updated; and

means for processing said updated component and said at least one other component at said another version if said updated component and said at least one other component have been updated.

Regarding claim 21, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 15, further comprising: means for utilizing a cluster version identifier to represent a lowest running version of said distributed computing environment; and

means for emulating, by said updated component, said lowest running version when any one of said component and said at least one other component have not been updated to said one version.

Regarding claim 22, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 21, further comprising means for updating said cluster version identifier, to correspond to said one version, when said component and said at least one other component have been updated to said one version.

Regarding claim 23, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 15, further comprising means for backing said updated component out of said another version to an older version.

Regarding claim 24, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 23, wherein said means for backing out comprises means for updating a component version identifier of said backed out component to correspond with said older version.

Regarding claim 25, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 23, wherein said older version comprises said one version.

Regarding claim 26, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12)

discloses the system of claim 23, wherein said older version comprises an intermediate version.

Regarding claim 27, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 26, further comprising means for emulating, by said backed-out component, said one version.

Regarding claim 28, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the system of claim 15, wherein said means for updating comprises means for updating a plurality of components of said computing environment.

Regarding claim 29, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses a system for updating components in a computing environment, said system comprising:

a computing node adapted to update a component of said computing environment which is associated with at least a portion of a unit of work from one version to another version; and

said computing node being further adapted to emulate, by said updated component, said one version while at least one other component of said computing environment associated with said unit of work, remains at said one version

Regarding claim 30, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses an article of manufacture, comprising:

at least one computer usable medium having computer readable program code means embodied therein for causing the updating of components in a computing environment, the computer readable program code means in said article of manufacture comprising:

computer readable program code means for updating a component of said computing environment which is associated with at least a portion of a unit of work from one version to another version; and

computer readable program code means for emulating, by said updated component, said one version while at least one other component of said computing environment associated with said unit of work, remains at said one version.

Regarding claim 31, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 30, wherein said component and said at least one other component comprise multiple images of a single program, and said unit of work comprises a single task.

Regarding claim 32, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 31, wherein said multiple images are in communication with one another.

Regarding claim 33, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 30, wherein said component and said at least one other component process said unit of work on a plurality of nodes of a distributed computing environment.

Regarding claim 34, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 30, wherein said computer readable program code means for updating comprises computer readable program code means for updating a component identifier of said updated component to correspond to said another version.

Regarding claim 35, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 34, further comprising:

computer readable program code means for comparing said component identifier of said updated component with at least one component identifier of said at least one other component to determine whether said updated component and said at least one other component have been updated:

computer readable program code means for emulating, by said updated component, said one version if any one of said updated component and said at least one other component have not been updated; and

computer readable program code means for processing said updated component and said at least one other component at said another version if said updated component and said at least one other component have been updated.

Regarding claim 36, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 30, further comprising:

computer readable program code means for utilizing a cluster version identifier to represent a lowest running version of said distributed computing environment; and computer readable program code means for emulating, by said updated component, said lowest running version when any one of said component and said at least one other component have not been updated to said one version.

Regarding claim 37, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 36, further comprising computer readable program code means for updating said cluster version identifier, to correspond to said one version, when said component and said at least one other component have been updated to said one version.

Regarding claim 38, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 30, further comprising computer readable program code means for backing said updated component out of said another version to an older version.

Regarding claim 39, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 38, wherein said computer readable program code means for backing out comprises computer readable program code means for updating a component version identifier of said backed out component to correspond with said older version.

Regarding claim 40, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 38, wherein said older version comprises said one version.

Regarding claim 41, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 38, wherein said older version comprises an intermediate version.

Regarding claim 42, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 41, further comprising computer readable program code means for emulating, by said backed-out component, said one version.

Regarding claim 43, Krause (abstract; col. 1, lines 64 to col. 2, lines 1-6; fig. 12) discloses the article of manufacture of claim 30, wherein said computer readable program code means for updating comprises computer readable program code means for updating a plurality of components of said computing environment.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following: 6564376, 5845116, 5519875 all disclose a distributed computing system.

Communication

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 703-305-6318. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronnie Mancho
Examiner
Art Unit 3663

9/30/04

GARY CHIN
PRIMARY EXAMINER